<u>IN THE CLAIMS</u>

Please cancel claims 1, 2, 4, 10 and 11, amend claims 3 and 5-9, and add new claims 12-17 as follows:

1-2.   (Cancelled).

3.   (Currently Amended)   ~~Method of noise filtering (3) as claimed in claim 2~~<u>A method of noise filtering a signal, the method comprising the steps of:</u>

<u>estimating a type of noise in the signal; and</u>

5   <u>enabling one of at least two noise filtering operations, the enabled noise filtering operation being a most suitable noise filtering operation for the estimated type of noise,</u>

<u>wherein said enabling step comprises the sub-steps:</u>

<u>enabling a median filtering operation if the estimated</u>

10   <u>type of noise is long-tailed noise; and</u>

<u>enabling a spatio-temporal rational filtering operation if the estimated type of noise is Gaussian noise or contaminated Gaussian noise,</u>

<u>wherein the</u> sub-step of enabling a spatio-temporal

15   rational filtering operation ~~(310,311)~~ comprises<u> the further sub-steps:</u>

enabling a first spatio-temporal_rational filtering

operation (310) if the estimated type of noise is Gaussian noise;

and

20   enabling a second spatio-temporal_rational filtering

operation (311) if the estimated type of noise is contaminated

Gaussian noise,

————and wherein the first spatio-temporal_rational filtering

operation (310) takingtakes into account at least one temporal

25   direction, and the second spatio-temporal_rstional filtering

operation (311) takingtakes into account at least one combination

of a temporal direction and a spatial direction.

4.   (Cancelled).

5.   (Currently Amended)   Method of noise filtering (3) as

claimed in claim 2A method of noise filtering a signal, the method

comprising the steps of:

          estimating a type of noise in the signal; and

5   enabling one of at least two noise filtering operations,

the enabled noise filtering operation being a most suitable noise

filtering operation for the estimated type of noise,

          wherein said enabling step comprises the sub-steps:

          enabling a median filtering operation if the estimated

10   type of noise is long-tailed noise; and

enabling a spatio-temporal rational filtering operation if
the estimated type of noise is Gaussian noise or contaminated
Gaussian noise,

and wherein:

15   a kurtosis of the noise ~~(z)~~ is used ~~(303)~~ as a metric for
estimating the type of noise;

the median filtering operation ~~(312)~~ is enabled if the
kurtosis is above a first threshold; and

the spatio-temporal rational ~~noise~~ filtering operation
20 ~~(310, 11)~~ is enabled if the kurtosis is below said first
threshold~~;~~.

6.   (Currently Amended)   ~~Method~~ The of noise filtering ~~(3)~~ as
claimed in claim 3, wherein:

a kurtosis of the noise ~~(z)~~ is used ~~(303)~~ as a metric for
estimating the type of noise;

5   the median filtering operation ~~(312)~~ is enabled if the
kurtosis is above a first threshold;

~~the rational noise filtering operation (310,311) is~~
~~enabled if the kurtosis of the noise is below said first threshold,~~
~~wherein the rational filtering operation comprises:~~

10   ~~enabling~~ the first spatio-temporal rational filtering
operation ~~(310)~~ is enabled if the kurtosis is below a second

12. (New)   The method of noise filtering as claimed in claim 5, wherein in said noise estimating step, the noise in the signal is estimated by a difference between the signal and a noise-filtered version of the signal.

13. (New)   The method of noise filtering as claimed in claim 12, wherein the noise-filtered version of the signal is obtained by subjecting the signal to a median filtering operation.

14. (New)   A device for noise filtering a signal, the device comprising:

 means for estimating a type of noise in the signal;

 a median filter for filtering said signal;

5 a first spatio-temporal rational filter and a second spatio-temporal rational filter for filtering said signal; and

 means for enabling one of said median filter and said first and second spatio-temporal rational filters, the enabled filter being a most suitable filter for the estimated type of

10 noise,

 wherein said enabling means:

 enables said median filter if the estimated type of noise is long-tailed noise;

 enables said first spatio-temporal rational filter if the

15 estimated type of noise is Gaussian noise; and

threshold, said second threshold being lower than said first

threshold; and

15   ~~enabling~~ the second spatio-temporal rational filtering

operation ~~(311)~~ is enabled if the kurtosis is above the second

threshold and below the first threshold.

7.   (Currently Amended)   ~~A~~ The method of noise filtering ~~(3)~~ as

claimed in claim 6, wherein the first threshold is about 15 and the

second threshold is about 6.

8.   (Currently Amended)   ~~Method~~ The method of noise filtering

~~(3)~~ as claimed in claim ~~1~~3, wherein in said noise estimating step,

the noise ~~(z)~~ in the signal is ~~approximated~~ estimated by a

difference ~~(302)~~ between the signal ~~(x)~~ and a noise-filtered ~~(301)~~

5   version of the signal ~~(x)~~.

9.   (Currently Amended)   ~~Method~~ The method of noise filtering

~~(3)~~ as claimed in claim 8, wherein the noise-filtered version of

the signal ~~(x)~~ is obtained by subjecting the signal ~~(x)~~ to a median

filtering operation ~~(301)~~.

10-11.   (Cancelled).

enables said second spatio-temporal rational filter if the extimated type of noise is contaminated Gaussian noise,

and wherein the first spatio-temporal rational filter takes into account at least one temporal direction, and the second
20 spatio-temporal rational filter takes into account at least one combination of a temporal direction and a spatial direction.

15.   (New)   A video system comprising:

means for obtaining an image sequence; and

a device as claimed in claim 14 for noise filtering the image sequence.

16.(New.)A device for noise filtering a signal, the device comprising:

means for estimating a type of noise in the signal;

a median filter for filtering said signal;
5   a spatio-temporal rational filter; and

means for enabling one of said median filter and said spatio-temporal rational filter, the enabled filter being a most suitable filter for the estimated type of noise,

wherein said enabling means enables said median filter if
10 the estimated type of noise is long-tailed noise, and enables said spatio-temporal rational filter if the estimated type of noise is Gaussian noise or contaminated Gaussian noise,

wherein said estimating means uses a kurtosis of the noise
as a metric for estimating the type of noise,

15   and wherein said enabling means:

enables said median filter if the kurtosis is above a
first threshold; and

enables said spatio-temporal rational filter if the
kurtosis is below said first threshold.

17.   (New)   A video system comprising:

means for obtaining an image sequence; and

a device as claimed in claim 16 for noise filtering the
image sequence.